

# Listening to shortwave radio broadcasts from around the world is informative and fun

By Charles A. Sanders

**T**he voice from the radio was clear, yet was speaking in an unknown language. Tuning in another frequency brought the staccato dits and dashes of a Morse code transmission. A little more tuning brought in an understandable yet noticeably foreign English broadcast.

If you can recall the first shortwave radio broadcast you ever heard, you may remember it as a crackling voice or melody, with the signal fading or growing in strength. The fact that these signals were coming from far around the world was amazing, to say the least.

One does not have to be a *ham*, or amateur radio operator, to enjoy tuning the airwaves. An amateur radio license is required only for transmitting on the air. As a listener, you are free to tune in to your heart's content. Long distance monitoring or "DXing" is not only an interesting pastime, it can be an efficient method of acquiring information not available elsewhere.

Unlike normal AM or FM radio broadcasts, shortwave radio depends upon the atmospheric layers surrounding the earth to "go the distance." These radio waves radiate from their transmission point, then actually "skip" off of the ionosphere, then back to earth to some point far distant from where they originate. The radio signal may actually skip several times before

it loses its strength. This characteristic is what enables you to glimpse life halfway around the world, via your radio.

A good, dependable radio receiver is a definite asset for monitoring these distant broadcasts. For the homesteader, or other remote location, or the casual listener, shortwave radio listening can be a very enjoyable and infor-



mative pastime. During normal times, dozens of entertaining broadcasts may be picked up on just about any evening. In emergencies or during events of international significance, these radios can help the listener monitor important events as they develop, often right where they are occurring in the world.

## What's out there

There are identifiable shortwave broadcast stations in dozens and dozens of countries around the world. Some of the big "powerhouse" stations include broadcasters such as the Voice of America, the BBC World Service, Radio Canada International, Radio Australia, Radio Netherlands, Swiss Radio International, Deutsche Welle, Radio Moscow International, Radio Japan, Radio South Africa, The Voice of Free China, and many others. One thing you will learn about foreign broadcasts is that not everyone is exactly sympathetic to the United States.

Many religious broadcast networks use the shortwave frequencies. They broadcast their particular messages along with music, commentary, etc., all over the world, and seem to have a very large following. One of the largest and best of these broadcasters is HCJB in Quito, Ecuador. Others include WRNO, WCCR, WYFR Family Radio, and WHRI.

Other broadcasters direct their programming to "patriotic" groups and individuals. There are programs describing how to deal with the predicted economic collapse, how to buy gold and silver, acquiring various items for a survivalist's stores, and other subjects. Their news coverage and commentary convey a noticeably "conservative" stance. On the other hand, at least one broadcast station

works to counter these with their own "liberal" broadcasts. Even the short-wave frequencies are not without some controversy and name-calling.

Scheduled broadcasts in English are made from almost every international station. Broadcast schedules can be obtained from most of the international stations, particularly the larger ones. Most of these broadcasters include their mailing addresses in their programming. Some stations even offer on-air language instruction as a part of their programming.

As I mentioned, it is possible to listen to events of international importance as they develop, from where they develop. For example, back when Operation Desert Storm began, we had two television sets (tuned to two different networks) and our shortwave radio turned on. The shortwave was tuned to the British Broadcasting Company (BBC). After a while, we pretty well abandoned the network TV coverage in favor of the more complete shortwave coverage.

## Universal Coordinated Time

One thing which you will quickly learn is that shortwave programming is set up on Universal Coordinated Time (UCT). UCT is the time at the *zero or reference meridian* on the globe. UCT was formerly referred to as "Greenwich Mean Time (GMT)". GMT refers to the fact that the reference meridian passes through Greenwich, England.

Time changes one hour with each change of 15 in longitude. EST, CST, MST, and PST are 5, 6, 7, and 8 hours "earlier" than the time at the reference meridian. They generally correspond to the 75th, 90th, 105th, and 120th meridians.

The table on this page is useful in computing listening times for shortwave radio broadcasts originating from countries around the world.

## Buying your radio

Now that you've decided that you want to tune in the world, which radio do you want to buy?

A good quality portable radio can do double duty, serving as your AM-FM receiver to receive regular commercial radio broadcasts, as well as picking up shortwave broadcasts. The small portable set which I have does just that. I listen to shortwave broadcasts from around the world in the evening, and the radio wakes me up to the local stereo FM country station in the morning. Select a radio that covers the portion of the radio spectrum in which you are interested. Fortunately, this is not as difficult as it sounds. Most portable DX radios on the market

today include the standard AM-FM broadcast bands. Some may also offer some combination of bands to tune in aircraft, TV, weather, or police.

I recommend picking up a copy of the current Passport To World Band Radio, even prior to purchasing your radio. Not only will the book provide information on tuning in practically every international shortwave station in the world, it also contains information on most of the popular shortwave receivers available, all "star" rated by the editors. This book helped me to decide on the model which I purchased to replace my old radio. Another attractive feature of this guide is the hour-by-hour guide to what you can find across the bands.

### Converting Universal Coordinated Time (UCT) to US times

EST	UCT	CST	MST	UCT	PST
1900	0000*	1800	1700	0000*	1600
2000	0100	1900	1800	0100	1700
2100	0200	2000	1900	0200	1800
2200	0300	2100	2000	0300	1900
2300	0400	2200	2100	0400	2000
0000*	0500	2300	2200	0500	2100
0100	0600	0000*	2300	0600	2200
0200	0700	0100	0000*	0700	2300
0300	0800	0200	0100	0800	0000*
0400	0900	0300	0200	0900	0100
0500	1000	0400	0300	1000	0200
0600	1100	0500	0400	1100	0300
0700	1200	0600	0500	1200	0400
0800	1300	0700	0600	1300	0500
0900	1400	0800	0700	1400	0600
1000	1500	0900	0800	1500	0700
1100	1600	1000	0900	1600	0800
1200	1700	1100	1000	1700	0900
1300	1800	1200	1100	1800	1000
1400	1900	1300	1200	1900	1100
1500	2000	1400	1300	2000	1200
1600	2100	1500	1400	2100	1300
1700	2200	1600	1500	2200	1400
1800	2300	1700	1600	2300	1500

\* Or 2400. 2400 is associated with the date of the day that is ending, 0000 with the day just beginning.

Another book which you will find useful is the World Radio & TV Handbook. This guide offers information such as location maps, addresses of many broadcast stations, including standard AM-FM stations. As suggested by the title, it also provides information on television broadcasters throughout the world and satellite broadcasts.

Since most of us are not dripping with money, price will likely be an important factor in selecting your radio. However, quality enters into the equation, too. You do not need to sink a fortune into your new radio, but you will want to stay away from the really cheap ones.

For a world-band receiver, \$50 to \$75 is not going to buy much of a radio. You will be able to pick up most of the big power broadcasters, but anything beyond that will be more difficult and unpredictable. These less expensive radios lack the tuning sensitivity and frequency selectability that higher quality models have.

A decent portable world-band receiver can be purchased for between \$175 and \$400. With the higher prices, you might expect more and better features, and in most cases this is true. The Grundig YB-400 I have costs around \$200 and is doing a very nice job. It has many features of larger and more expensive radios. As I occasionally travel in my work, its compact size permits me to take it along to use for entertainment, information, and wake-up duty.

One feature you should definitely look for in a radio is digital tuning. These sets are much more sensitive and accurate than the older analog or "slide rule" type tuners. It is simply much easier to tune in a station with one of these sets.

Sangean, Sony, Radio Shack, and Grundig are among the more popular manufacturers of compact receivers. They have models for just about any budget.

Drake, Kenwood, JRC, Yaesu, and others offer larger countertop radios

with more features, but these will require a much greater investment. They are equipped with more sensitive tuning, more and better noise filters, and other features which make them attractive to the more serious listener. It is possible to tie up hundreds or even thousands of dollars on one of these sets.

For my money, I selected the Grundig Yachtboy 400. This radio offers standard AM radio, FM stereo, sideband capabilities to better monitor "ham" operators, and good coverage of all of the shortwave bands. It is portable, operable from either batteries or AC/DC, and has an external antenna jack as well as a good telescoping antenna. It includes an ear phone, a padded case, and an external portable reel-type long wire antenna.

## External antennas

Speaking of antennas, you should note that in almost every case, shortwave reception will be substantially improved if you can attach an external antenna to your set. The familiar telescoping antennas which are standard equipment on most portable radios will do a very good job, but a simple external antenna can do a lot to improve your reception. The antenna doesn't need to be anything fancy. As long as you have an external antenna jack on your radio, any long length of light wire will serve as your shortwave signal grabber. Merely looping the wire along the baseboard in a room will work. So will running the wire out a window and out to a tree, bush, or post. An outside antenna will usually work a little better in improving reception, due to the fact that you are removing it from the network of electrical devices, wiring, plumbing, and metal structural members which can contribute to signal interference.

A simple way to convince yourself of the value of an external antenna is to tune in a fairly good shortwave station with the external antenna attached. Then unplug the external

antenna, and you will probably hear the radio signal nearly or completely disappear.

There is one thing to remember about using an outside antenna, though. If it is suspended much above the ground, then **be sure to have a lightning arrestor hooked into the antenna** between the antenna and the radio. This simple device will help to prevent electrical disasters.

Regardless of the radio you decide to purchase, you will find a whole new world of music, news, and information waiting right at your fingertips. Those long winter evenings will become a lot more interesting as you sit with a hot cup, tuning the airwaves.

## Suppliers

Listed below are a few suppliers of high-quality radios, accessories, guidebooks, and other items of interest to DXers. This is not a complete list by any means, but should get the new listener started.

Gilfer Shortwave  
52 Park Avenue  
Park Ridge, NJ 07656  
Information: 201-391-7887  
Orders: 800-GILFER-1  
Fax: 201-391-7433

ACE Communications  
10707 E. 106th St.  
Fishers, IN 46038  
800-445-7717 (24 hr.)

Electronic Equipment Bank  
323 Mill St.  
Vienna, VA 22130  
Technical information:  
703-938-3350  
Orders: 800-368-3270  
Fax: 703-938-6911

Universal Radio  
6830 Americana Pkwy.  
Reynoldsburg, OH 43068-4113  
Information: 614-866-4267  
Orders: 800-431-3939  
Fax: 614-866-2339 (24 hr.) Δ